

09/164,293

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:23:32 ON 21 APR 2000

=> file ca

=> s bioactive glass

9926 BIOACTIVE  
424517 GLASS  
L1 527 BIOACTIVE GLASS  
(BIOACTIVE(W) GLASS)

=> s non-interlink? or (non interlink?)

367049 NON  
1032 INTERLINK?  
2 NON-INTERLINK?  
(NON(W) INTERLINK?)  
367049 NON  
1032 INTERLINK?  
2 NON INTERLINK?  
(NON(W) INTERLINK?)  
L2 2 NON-INTERLINK? OR (NON INTERLINK?)

=> s l1 and l2

L3 2 L1 AND L2

=> d ibib abs 1-2

L3 ANSWER 1 OF 2 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 132:227460 CA

TITLE: Anti-inflammatory and antimicrobial uses for  
bioactive glass compositions

INVENTOR(S): Greenspan, David C.; West, Jon K.; Lee, Sean; Meyers,  
James L.; Diamond, Mason

PATENT ASSIGNEE(S): Usbiomaterials Corp., USA

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000015167	A1	20000323	WO 1999-US20644	19990910
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

## PRIORITY APPLN. INFO.:

US 1998-PV99725 19980910  
 US 1999-392516 19990909

AB Compsn. and methods for treating wounds to significantly reduce the healing time, reduce the incidence of scar formation, improve the success of skin grafts, reduce the inflammatory response and providing anti-bacterial treatments to a patient in need thereof, that include small

**non-interlinked particles of bioactive glass** or highly porous **bioactive glass**, are disclosed. Anti-bacterial solns. derived from **bioactive glass**, and methods of prepn. and use thereof, are also disclosed. The comps. include **non-interlinked particles of bioactive glass**, alone or in combination with anti-bacterial agents and/or anti-inflammatory agents. The comps. can include an appropriate carrier for topical administration.

## Anti-bacterial

properties can be imparted to implanted materials, such as prosthetic implants, sutures, stents, screws, plates, tubes, and the like, by incorporating small **bioactive glass** particles or porous **bioactive glass** into or onto the implanted materials. Anti-bacterial properties can also be imparted to devices

## used

for in vitro and ex vivo cell culture by incorporating **non-interlinked particles of bioactive glass** into the devices. Anti-bacterial comps. derived from aq. exts. of **bioactive glass** are also disclosed. These comps. can be used, for example, in food prepn., solns. used for cell culture, and buffer solns., such as i.v. solns. A wound was treated with a mixt. of particulate noninterlinked **bioactive glass** with a fine particle size, a topical antibiotic including sulfadiazine, and a petrolatum base carrier. After only 4 days, seepage of the wound was stopped and the surface of the wound appeared dry. If only a topical antibiotic was used to treat a wound in a patient with vasculitis, it would normally take about 2 weeks to stop seepage.

L3 ANSWER 2 OF 2 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 131:106851 CA

TITLE: **Bioactive glass** treatment of inflammation in skin conditions

INVENTOR(S): Lee, Sean; Meyers, James L.

PATENT ASSIGNEE(S): Usbiomaterials Corporation, USA

SOURCE: PCT Int. Appl., 13 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9937287	A1	19990729	WO 1999-US391	19990122
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ,				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				

TM

09/164,293

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
AU 9923134 A1 19990809 AU 1999-23134 19990122  
PRIORITY APPLN. INFO.: US 1998-12272 19980123  
WO 1999-US391 19990122

AB This invention relates to a method for treating inflammatory symptoms such as burning, redness, itching, swelling and pain which accompany skin disorders other than wounds of the skin. The method comprising topical application of a topical medicinal compn. comprising a **non-interlinked particulate bioactive glass** mixed with a topical medicinal carrier to the site of the skin disorder.

=> s bioactive glass

9926 BIOACTIVE  
424517 GLASS  
L4 527 BIOACTIVE GLASS  
(BIOACTIVE(W)GLASS)

=> s antiboitic

L5 4 ANTIBOITIC

=> s 15 and 14

L6 0 L5 AND L4

=> s bandage or wrap and 14

881 BANDAGE  
1299 WRAP  
L7 881 BANDAGE OR WRAP AND L4

=> s 17 and antibiotic

79312 ANTIBIOTIC  
L8 19 L7 AND ANTIBIOTIC

=> d ibib abs 1-19

L8 ANSWER 1 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 132:150781 CA  
TITLE: **Antibiotic** residues in milk samples obtained from cows after treatment for papillomatous digital dermatitis  
AUTHOR(S): Britt, Jenks S.; Carson, Mary C.; Von Bredow, Jurgen D.; Condon, Robert J.  
CORPORATE SOURCE: Department of Medical Sciences, School of Veterinary Medicine, University of Wisconsin, Madison, WI, 53706-1102, USA  
SOURCE: J. Am. Vet. Med. Assoc. (1999), 215(6), 833-836  
CODEN: JAVMA4; ISSN: 0003-1488  
PUBLISHER: American Veterinary Medical Association  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB **Antibiotic** residues were studied in milk obtained from dairy cattle with papillomatous digital dermatitis (PDD) after topical treatment

AUTHOR(S): Zabka, M.; Benkova, M.  
 CORPORATE SOURCE: Farm. Fak., Univ. Komenskeho, Bratislava, Slovakia  
 SOURCE: Cesk. Farm. (1993), 42(4), 170-2  
 CODEN: CKFRAY; ISSN: 0009-0530  
 DOCUMENT TYPE: Journal  
 LANGUAGE: Slovak

AB The paper evaluates the local anesthetic effect of heptacaine, a carbamate type anesthetic agent, formulated into microemulsion bases of the w/o type

in an amt. of 0.1% on the skin of rabbits and dogs. The nonaq. phase of microemulsions was formed by the aliph. hydrocarbons decane, dodecane, tridecane, tetradecane. Potassium oleate was employed as the surfactant and decanol as the cosurfactant. Microemulsions were administered cutaneously, s.c. and by means of occlusive **bandage**. To dogs they were administered cutaneously alone and simultaneously with a 5% aq. soln. of bacitracin to a large microbial eczema. The results indicated suitability of the employed microemulsion vehicles in cutaneous administration. An aq. soln. of 0.1% heptacaine used as the std. had no effect, whereas all of the evaluated microemulsion vehicles exerted effects. The most suitable microemulsion bases were tridecane contg. 13% tenside, water and cosurfactant, and decane contg. 15,4% surfactant with water and cosurfactant. With the former base (contg. tridecane) the onset

of heptacaine effect on the rabbit skin began 15 mins after administration, and on the dog skin after 20 mins. The effect lasted for 40 mins in both types of animals. With the latter base (contg. decane) the heptacaine effect on rabbits and dogs began after 10 mins and lasted for 30 mins. These microemulsions potentiated the therapeutic effect of the **antibiotic** bacitracin in the administration on the microbial eczema in the expt. on dogs.

L8 ANSWER 4 OF 19 CA COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 115:214947 CA  
 TITLE: Manufacture of collagen particles and spray bandages containing the collagen particles for wound healing  
 PATENT ASSIGNEE(S): Micro Collagen Pharmaceuticals, Ltd., USA  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03169900	A2	19910723	JP 1990-199341	19900730
US 5196185	A	19930323	US 1989-405520	19890911
PRIORITY APPLN. INFO.:			US 1989-405520	19890911

AB The title products are prepd. by e.g. mixing type I collagen and/or type III collagen with inert liq. (e.g. EtOH), mill-pulverizing the mixt., mixing with other ingredients (to granulated collagen <20 vol. %), degassing, adjusting pH to 2-9, and filling into an aerosol container. Thus, 10 g type I collagen in 90 g denatured alc. was pulverized, filled into a container, and mixed with 35 g Promoter A46 (Fluid Packing Inc.; isobutane-propane-n-butane mixt.). The container was processed and sealed to give a spray **bandage** for wound healing. Antiinflammatory, analgesic, and other agents may be added to the preps. The collagen

09/164,293

with oxytetracycline. Treatment 1 (n = 16) consisted of spraying of PDD lesions with 15 mL of a soln. contg. 100 mg of oxytetracycline/mL; lesions were sprayed twice daily for 7 days, using a garden sprayer. Treatment 2 (n = 12) consisted of a one-time application of a **bandage** that consisted of cotton soaked with 20 mL of a soln. contg. 100 mg of oxytetracycline/mL. Milk samples were obtained before and after treatment and assayed for tetracycline content by use of high-performance liq. chromatog. and a com. available tetracycline screening test. None of the cows in either treatment group had violative residues of oxytetracycline in milk samples. Producers treating lactating cows that have PDD, via topical application of oxytetracycline soln. at the concns. reported in this study, have a low risk of causing violative **antibiotic** residues in milk.

L8 ANSWER 2 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 126:132847 CA  
TITLE: Manufacture and use of supplemented chitin hydrogels  
INVENTOR(S): Drohan, William N.; Macphee, Martin J.; Miekka, Shirley I.; Singh, Manish; Elson, Clive; Taylor, John  
PATENT ASSIGNEE(S): Drohan, William N., USA; Macphee, Martin J.; Miekka, Shirley I.; Singh, Manish; Elson, Clive; Taylor, John  
SOURCE: PCT Int. Appl., 71 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9641818	A1	19961227	WO 1996-US10146	19960610
W: CA, JP, MX RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT,				
CA 2224253	AA	19961227	CA 1996-2224253	19960610
EP 830381	A1	19980325	EP 1996-921553	19960610
R: BE, CH, DE, FR, GB, LI, NL, SE				
JP 11507697	T2	19990706	JP 1996-503284	19960610
PRIORITY APPLN. INFO.: US 1995-109 19950609 WO 1996-US10146 19960610				

AB The chitin or chitosan-derived hydrogel of the present invention, e.g., N,O-carboxymethylated chitosan, provides an effective system for delivery of drugs, e.g., tetracycline, ampicillin, or ciprofloxacin hydrochloride, and intact plasma proteins, including thrombin-sensitive plasma proteins. The hydrogel does not inhibit full-thickness skin wound healing. The particular supplement delivered by the chitin hydrogel is selected as a function of its intended use. A dressing, specifically a **bandage** for treating wounded tissue and a compn. that promotes delivery of plasma protein, specifically factor VIII and IX for treatment of hemophilia A and B, are also claimed.

L8 ANSWER 3 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 120:38065 CA  
TITLE: Microemulsions containing local anesthetics. IV.  
Effect of microemulsion dispersion systems of the w/o type containing heptacaine in the in vivo conditions

particles also may be incorporated into ointments, gels, or other preps.

L8 ANSWER 5 OF 19 CA COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 112:240557 CA  
 TITLE: Two-layer **bandage** made of a polymer and a water-absorbing material  
 PATENT ASSIGNEE(S): Theilemann, Horst, Fed. Rep. Ger.  
 SOURCE: Ger., 5 pp.  
 CODEN: GWXXAW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3801722	C1	19890824	DE 1988-3801722	19880121

AB A **bandage** consists of a microporous layer and a water-absorbing 2nd layer. The microporous layer is made of a polymer, preferably expanded poly(tetrafluoroethylene), and is permeable to gas and vapor and impermeable to water. The 2nd layer is made of cellulose or wadding, and is satd. with water or with an aq. soln., such as of an **antibiotic**. The **bandage** shows high tearing strength and biocompatibility, and is esp. useful on joints.

L8 ANSWER 6 OF 19 CA COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 109:61478 CA  
 TITLE: Porous layer wound dressing with good tissue affinity  
 INVENTOR(S): Shioya, Nobuyuki; Kuroyanagi, Yoshimitsu; Koganeo, Yasumi; Yoda, Ryuichiro  
 PATENT ASSIGNEE(S): Nippon Zeon Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 10 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 265906	A2	19880504	EP 1987-115766	19871027
EP 265906	A3	19911002		
EP 265906	B1	19950419		
R: DE, FR, GB, IT				
JP 63111872	A2	19880517	JP 1986-260002	19861031
JP 63111873	A2	19880517	JP 1986-260003	19861031
JP 63115563	A2	19880520	JP 1986-260142	19861031
US 4997425	A	19910305	US 1990-501980	19900329
PRIORITY APPLN. INFO.:			JP 1986-260002	19861031
			JP 1986-260003	19861031
			JP 1986-260142	19861031
			US 1987-110907	19871021
			US 1989-346330	19890501

AB The title wound dressing, useful for absorbing wound exudate, comprises a porous layer having a good affinity to tissues where a 1st portion to be on the wound surface has pore diam. 20-500 .mu.m and thickness 1-10 mm, and a 2nd portion atop the 1st portion has pore diam. .ltoreq.20 .mu.m and thickness 0.5-5 .mu.m. A poly(amino acid) soln. is poured into a vessel

and converted into a gel at room temp.; after the surface is dried with warm air, the gel is cooled suddenly to the frozen state and dried under vacuum to give a wound dressing consisting of a crust layer, or outer surface layer, and a sponge layer. A mixt. of L-leucine homopolymer and Ag sulfadiazine was dissolved in C6H6 to concn. 0.25 g/dL and pored into an aluminum vessel. The polymer soln., after only the surface was dried with warm air, was quenched at -30.degree. and subjected to freeze drying under vacuum to obtain a sheet-molded wound dressing. The dressing was gas-sterilized and coated with an aq. soln. (concn. 1 g/dL) of human fibrinogen, quenched to -20.degree., freeze-dried, and sterilized by UV radiation. The finished product was stored at 5.degree. in darkness. Surgically mutilated 6-8-wk-old rats were treated with gentamicin ointment, the wound dressing applied and a Telfa pad sutured to the dressing. At 2 and 4 wk, histol. exam. of the rats showed good vital adhesion and new tissue development.

L8 ANSWER 7 OF 19 CA COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 104:213303 CA  
 TITLE: Biodegradable matrix  
 INVENTOR(S): Silver, Frederick H.; Berg, Richard A.; Birk, David E.; Weadock, Kevin; Whyne, Conrad  
 PATENT ASSIGNEE(S): University of Medicine and Dentistry of New Jersey, USA  
 SOURCE: PCT Int. Appl., 59 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 8504413	A1	19851010	WO 1985-US504	19850327
W: AT, AU, BR, CH, DE, DK, FI, GB, HU, JP, KP, KR, LK, LU, MC, MG, MW, NL, NO, RO, SE, SU				
RW: AT, BE, CH, DE, FR, GB, LU, NL, SE				
CA 1295796	A1	19920218	CA 1985-477358	19850325
AU 8542105	A1	19851101	AU 1985-42105	19850327
ES 541629	A1	19860401	ES 1985-541629	19850327
BR 8506206	A	19860415	BR 1985-6206	19850327
EP 177573	A1	19860416	EP 1985-901827	19850327
EP 177573	B1	19920102		
R: BE, CH, DE, FR, GB, LI, SE				
JP 61502129	T2	19860925	JP 1985-501598	19850327
JP 08011121	B4	19960207		
CN 85101396	A	19870131	CN 1985-101396	19850401
NO 8504723	A	19851126	NO 1985-4723	19851126
FI 8504692	A	19851127	FI 1985-4692	19851127
DK 8505474	A	19860124	DK 1985-5474	19851127
PRIORITY APPLN. INFO.:				
			US 1984-593733	19840327
			WO 1985-US504	19850327

AB Prepn. of a biodegradable collagen-based matrix in sponge or sheet form and in which a carrier compd. (fibronectin, laminin, hyaluronate, proteoglycan, epidermal- and platelet-growth factors, **antibiotic**, spermicide, fungicide, etc.) is incorporated is described. The process includes isolation of type I, II, and III collagens, mixing with a liq. medium contg. a dispersing agent and freeze drying. A crosslinking agent (carbodiimide or a succinimidyl active ester is added either prior to or after freeze drying. Swelling ratio, mech. properties, and

09/164,293

biocompatibility of the prepd. matrix were detd. and the results were favorable.

L8 ANSWER 8 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 102:154748 CA  
TITLE: Double-layer polymer films containing antibiotics  
AUTHOR(S): Chukhadzhyan, G. A.; Sarkisyan, F. A.; Karapetyan, S.  
A.; Kocharyan, K. M.; Mashinyan, N. Ch.; Gevorkyan,  
G.  
A.; Gabrielyan, E. S.  
CORPORATE SOURCE: Erevan. Med. Inst., Yerevan, USSR  
SOURCE: Arm. Khim. Zh. (1984), 37(9), 586-90  
CODEN: AYKZAN; ISSN: 0515-9628  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian

AB Self-adhesive double-layer polymer films contg. antibiotics within a hydrophilic layer attached to a hydrophobic layer were prepd. for application to wounds. The hydrophobic layer was cast from a soln. of poly(2-hydroxyethyl methacrylate) (I homopolymer) [25249-16-5], I-N-vinylpyrrolidone-ethylene glycol dimethacrylate copolymer [36425-29-3], I-p-divinylbenzene copolymer [87097-08-3], or poly(vinyl butyral). The hydrophilic layer was cast from solns. contg. Solvar [37380-95-3] or vinylpyrrolidone-vinyl acetate copolymer [25086-89-9] (which conferred adhesiveness), the **antibiotic** (streptomycin [57-92-1], lincomycin [154-21-2], monomycin [54597-56-7], tetracycline [60-54-8], celorin [50-59-9], rondomycin [914-00-1], or gentamicin [1403-66-3]), poly(vinylpyrrolidone) [9003-39-8] (to prolong the release of the **antibiotic** from the film), a drug stabilizer (Rongalite, Na2S2O3, Na EDTA, or Na2SO4), and monoethanolamine to adjust the pH. The hydrophobic film was cast on siliconized glass plates and the hydrophilic film was then cast on top of the hydrophobic one. Large samples of such films were cut into squares of from 1 .times. 1 cm to 50 .times. 50 cm, and the squares were sterilized with a 60Co source or UV radiation. Such films retained **antibiotic** activity when stored for >1 yr and exhibited sustained release of the **antibiotic** when tested in vitro.

L8 ANSWER 9 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 100:39652 CA  
TITLE: Tissue-adhering collagen wound dressing  
INVENTOR(S): Stemberger, Axel  
PATENT ASSIGNEE(S): Ruhland, Dr., Nachfolger G.m.b.H., Fed. Rep. Ger.  
SOURCE: Ger., 13 pp.  
CODEN: GWXXAW  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3212412	A1	19831013	DE 1982-3212412	19820402
DE 3212412	C2	19860102		
EP 90997	A2	19831012	EP 1983-102773	19830321
EP 90997	A3	19851030		
EP 90997	B1	19891018		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
AT 47317	E	19891115	AT 1983-102773	19830321
JP 58185162	A2	19831028	JP 1983-58557	19830402



09/164,293

JP 02060339 B4 19901217  
PRIORITY APPLN. INFO.:

DE 1982-3212412 19820402  
EP 1983-102773 19830321

AB Wound coverings consist of a 0.3-2-cm-thick layer of collagen coated on 1 or both sides with a 0.2-2-mm-thick fibrinogen layer contg. 0.5-10 mg/cm<sup>2</sup>.

The fibrinogen contains SH groups derived from sulfhydration or redn. of disulfide bridges. The collagen is highly pure (N/hydroxyproline ratio by

wt. of <3). At least 1 of the layers may contain an **antibiotic**, antifibrinolytic, and/or thrombin [9002-04-4]. Collagen was prepd. from beef tendons by extg. with pH 3.7 citrate buffer, dialyzing against 1% HOAc, incubating at 10.degree. with pepsin at a collagen/pepsin ratio of 50:1, dialyzing against alk. H<sub>2</sub>O at pH 8, centrifuging, dissolving in 1% HOAc, and dialyzing again until the N/hydroxyproline ratio was <3. A

1.5% collagen soln. was prepd. in 0.05% HOAc, and 100 mL was poured in a 10 cm .times. 10 cm form and freeze-dried to give a sponge. Before formation

of the sponge, 0.4 g tranexamic acid [1197-18-8], 80,000 units of aprotinin [9087-70-1] or 200 mg gentamycin sulfate [1405-41-0] may be added to the soln. Fibrinogen was dissolved in isotonic saline and incubated at pH 10.6 and 0.degree. for 35 min with N-acetylhomocysteine thiolactone; the reaction was stopped by addn. of pH 7 phosphate buffer, and the SH-modified fibrinogen was desalted and concd. by ultrafiltration. The soln. was sprayed on the collagen sponge at 5 mg fibrinogen/cm<sup>2</sup>, and the sponge was freeze-dried and packaged. The collagen layer was 10 cm thick and the fibrinogen layer was .apprx.0.3 mm thick. Results with the use

of the gentamycin-contg. product in surgical wound healing and hemostasis are described.

L8 ANSWER 10 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 99:163993 CA

TITLE: Radiation sterilization of medical products in the Philippines

AUTHOR(S): Singson, C.; Carmona, C.; De Guzman, Z.; Barrun, W.; Lanuza, L.

CORPORATE SOURCE: Philippine At. Energy Comm., Quezon City, Philippines

SOURCE: Radiat. Phys. Chem. (1983), 22(3-5), 693-9

CODEN: RPCHDM; ISSN: 0146-5724

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A 2.5 Mrad dose was sufficient for sterilization of PVC [9002-86-2] and absorbent cotton, surgical gauze, **bandage**, visceral packs, and some antibiotics and ophthalmic ointments. Results of biol. studies indicate no signs of toxicity on exptl. mice injected with exts. from irradiated samples. The contaminants are identified as Pseudomonas, Staphylococcus aureus and Bacillus subtilis. The D10 values of survivors of higher doses ranged below 0.235 Mrad suggesting that these contaminants

can be eliminated by the generally used sterilizing dose of 2.5 Mrad. Physicochem. tests did not indicate any significant degrdn. of the irradiated products. Ophthalmic and topical **antibiotic** ointments showed no marked decrease in potency. Fading tests on dosimeters used showed that red perspex is a more efficient dosimeter than

clear perspex when irradiation time is prolonged. Thus, radiation

sterilization is tech. feasible for locally manufd. medical products.

L8 ANSWER 11 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 96:129794 CA  
 TITLE: Bandages containing enzymes and drugs  
 PATENT ASSIGNEE(S): Nitto Electric Industrial Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 56161058	A2	19811211	JP 1980-65826	19800517
JP 59010225	B4	19840307		

AB Bandages contg. drugs and therapeutic enzymes are presented. Ethylene-vinyl acetate copolymers in which the therapeutic agents are dispersed, are applied to the **bandage** material to release the drugs slowly for a prolonged period. Thus, a soln. (100 mL) contg. 20 g ethylene-vinyl acetate copolymer [24937-78-8] and 300 mg lysozyme [9001-63-2] was applied to a 0.1-mm-thick nonwoven polyester sheet. The thickness was adjusted to 0.3 mm. The sheet was immersed in water at 0.degree. for 1 h to allow the polymer to coagulate and washed with water to obtain a **bandage** material.

L8 ANSWER 12 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 93:138033 CA  
 TITLE: Polyurethanes containing antibiotics or other pharmaceuticals  
 INVENTOR(S): Meyer, Albert; Mueller, Hanno; Pfeifer, Manfred; Riedeberger, Joerg; Wagner, Klaus  
 PATENT ASSIGNEE(S): Ger. Dem. Rep.  
 SOURCE: Ger. (East), 11 pp.  
 CODEN: GEXXA8  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DD 139942	T	19800130	DD 1970-151942	19701209

AB Porous **bandage** materials are formed from polyurethanes in which antibiotics are incorporated to give long lasting effects for wound and burn treatment. The material allows aeration of the wound and secretions to be freely emitted. The long lasting effect decreased the need for frequent **bandage** changes. A compn. was prepd. from polyether 100.00, H<sub>2</sub>O 3.00, triethylenediamine (33% in dipropylene glycol) 0.65, di-Me ethanolamine 0.50, Sn(II) octoate 0.20, silicone oil 1.00, 1,4-butanediol 1.00 and chloramphenicol [56-75-7] 10.6 parts. This was mixed and tolylene diisocyanate was added with stirring to give a foam which hardens at 80.degree..

L8 ANSWER 13 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 83:120907 CA  
 TITLE: Spray-spun **bandage** composition  
 INVENTOR(S): Gurney, John A.

09/164,293

PATENT ASSIGNEE(S): Johnson and Johnson, USA  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	US 3880158	A	19750429	US 1974-457875	19740404
AB	A fibrous mat covering for minor wounds is dispensed from aerosol containers to provide for circulation of air and occlusion of liq. It is composed of an Ax-By-Az block copolymer where the A blocks are nonelastic and B is elastomeric. Local <b>antibiotic</b> and(or) antiseptic agents may also be included. Thus a block isoprene-styrene polymer [25038-32-8] (70:30) with a rel. viscosity of 1.230 in acetone-cyclohexane (40:60) was loaded in an aerosol with a blend of 38% vinyl chloride and 62% CF <sub>2</sub> Cl <sub>2</sub> .				

L8 ANSWER 14 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 80:124792 CA  
TITLE: Medicinal bandages with fine porosity from collagen  
INVENTOR(S): Cioca, Gheorghe; Tigaeru, Nicolae; Ionescu, Agrippa;  
Chiota, Nicolae; Constantinescu, Mihai; Niculescu, Gheorghe  
PATENT ASSIGNEE(S): Intreprinderea Flacara Rosie  
SOURCE: Fr. Demande, 4 pp.  
CODEN: FRXXBL  
DOCUMENT TYPE: Patent  
LANGUAGE: French  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
	FR 2170893	A1	19730921	FR 1972-3988	19720207
AB	Collagen bandages in form of a foamy mass, for temporary plasters, for the				
	coating of zones denuded of skin, such as burns or wounds were prepd. by lyophilization of collagen polydispersion, obtained from bovine skin. Thus, to a 0.8% polydispersion of collagen in 1 1.2% boric acid soln.,				
0.1	g Na merthiolate was added, and the mixt. was homogenized in a Turnix				
app.	until disappearance of agglomerate fibers. The mixt. was then frozen at -65.degree.-70.degree. in epoxide resins in layers up to 15 mm, for 2.5-3.2 hr, and sublimed in vacuo 10-3 to 10-5 torr for 20 hr, at 35.degree. to give a white foamy elastic mass, easy to mould, with d = 0.03 to 0.06 g/cm <sup>3</sup> . Before freezing, bactericide, <b>antibiotic</b> , or other medicaments, such as 1.5-2.0 g tetracycline, and(or) 0.5-0.75 g hydrocortisone can be added per 1000 ml polydispersion.				

L8 ANSWER 15 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 80:19597 CA  
TITLE: Medicinal **bandage** based on collagen by lyophilizing  
INVENTOR(S): Cioca, Gheorghe; Tigaeru, Nicolae; Ionescu, Agrippa;

09/164,293

Chiotan, Nicolae; Constantinescu, Mihai; Niculescu, Gheorghe  
PATENT ASSIGNEE(S): Intreprinderea Flacara Rosie  
SOURCE: Ger. Offen., 7 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2205063	A1	19730830	DE 1972-2205063	19720203
DE 2205063	C2	19840223		

AB Collagen films, contg. antibiotics or other antiinfective agents, can be prepd. by freeze-drying a dispersion of collagen and the desired agents. The films are useful for application to wounds.

L8 ANSWER 16 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 79:133247 CA  
TITLE: Antimicrobial cellulose materials  
AUTHOR(S): Rakhmanberdiev, G.; Mirnigmatova, Sh.; Gapeschina, V.  
CORPORATE SOURCE: Nauchno-Issled. Inst. Khim. Tekhnol. Khlopk.  
SOURCE: Tsellyul., Tashkent, USSR  
Med. Zh. Uzb. (1973), (7), 53-6  
CODEN: MZUZA8  
DOCUMENT TYPE: Journal  
LANGUAGE: Russian  
AB The antibacterial activity of streptomycin [57-92-1], tetracycline [60-54-8], streptocid [63-74-1], or tubazid [54-85-3] was not altered when the compds. were bound to cellulose dialdehyde. The antibacterial activity of the prepns., bound chem. to bandages or gauzes, persisted for 8 months. The prepns. were tested on Enterococcus, Salmonella typhi, Salmonella paratyphi, Escherichia coli, Staphylococcus aureus, Shigella flexneri, and Shigella boydii.

L8 ANSWER 17 OF 19 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 79:20571 CA  
TITLE: Antibiotic paper  
INVENTOR(S): Hinz, Charles Frank  
PATENT ASSIGNEE(S): American Cyanamid Co.  
SOURCE: U.S., 5 pp.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 3728213	A	19730417	US 1971-172880	19710818

PRIORITY APPLN. INFO.: US 1968-773954 19681106  
US 1970-42479 19700601

AB Antimicrobial paper suitable for the manuf. of bandages, diapers, sheets, and gowns was prepd. by the adsorption of 0.01-3% (based on dry fiber wt) of a 2-(C8-18 alkyl)pseudourea e.g. 2-n-dodecylpseudourea (I) [35010-99-2]

on pulp fibers prior to sheet formation. Carded paper samples sprayed with suspensions of 10 different microorganisms and aged 3 days at 30.deg.

and 75% relative humidity were free of microorganisms after the incubation period. Control samples contg. no I showed heavy microorganism growth.

L8 ANSWER 18 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 77:130630 CA

TITLE: Poly(vinyl chloride) fiber bandages impregnated with pharmaceuticals

INVENTOR(S): Larde, Raymond; Queuille, Andre

PATENT ASSIGNEE(S): Roussel-UCLAF

SOURCE: Ger., 4 pp.  
CODEN: GWXXAW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1492441	C3	19730222	DE 1963-R34698	19630315
PRIORITY APPLN. INFO.:			FR 1962-891342	19620316

AB Poly(vinyl chloride) (PVC) fiber bandages (non-wound adhesive) contg. antibiotics, corticosteroids, or sulfonamides, were prepd. by impregnating PVC-web with aq. soln. of the active substances blended with thickeners (cellulose ethers) and plasticizers [polyethylene glycols or poly-(vinyl alc.)]. Thus, 1.8 g Me cellulose, 60 ml, water, 10 g polyethylene glycol 300, sterilized at 120.degree., mixed with a sterile aq. soln. contg. 1 g framycetin sulfate in 25 ml water, then dild. to 100 ml were coated on a uv-sterilized PVC-web (4 g soln./100 ml web). Ten formulations for impregnates were given.

L8 ANSWER 19 OF 19 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 66:22215 CA

TITLE: **Bandage**

INVENTOR(S): Meyer, Gustav

PATENT ASSIGNEE(S): Beiersdorf A.-G.

SOURCE: Ger., 2 pp.  
CODEN: GWXXAW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1228030		19661103	DE	19581004

AB A **bandage** consisting of a textile, paper, or plastic with a padding bonded to it, is described. The padding is covered with two perforated water-insol. films or membranes, the film on the wound-side consisting of a vinyl or acrylic polymer or copolymer which contains a therapeutic **antibiotic** or germicidal agent in its pores; the secondary sheet not in contact with the wound is made of a polyamide, polycarbonate, polyurethan, or any other tear-resistant plastic material.

09/164,293

=> d his

(FILE 'HOME' ENTERED AT 08:23:32 ON 21 APR 2000)

FILE 'CA' ENTERED AT 08:23:35 ON 21 APR 2000

L1	527 S BIOACTIVE GLASS
L2	2 S NON-INTERLINK? OR (NON INTERLINK?)
L3	2 S L1 AND L2
L4	527 S BIOACTIVE GLASS
L5	4 S ANTIBOITIC
L6	0 S L5 AND L4
L7	881 S BANDAGE OR WRAP AND L4
L8	19 S L7 AND ANTIBIOTIC

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

STN INTERNATIONAL LOGOFF AT 08:32:13 ON 21 APR 2000

09/164,293

4 ANSWER 8 OF 11 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 129:113472 CA

TITLE: Quantitative comparison of in vivo bone generation  
with particulate Bioglass and hydroxyapatite as a  
bone

graft substitute.

AUTHOR(S): Fujishiro, Yoshinobu; Oonishi, Hironobu; Hench,  
Larry.

L.

CORPORATE SOURCE: Department of Materials, Imperial College of Science,  
London, SW7 2BP, UK

SOURCE: Bioceram., Proc. Int. Symp. Ceram. Med. (1997), 10,  
283-286

CODEN: BPCMFY

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Rates of in vivo bone generation were detd. by point-counting anal. of  
(100-300  $\mu$ m) particulate Bioglass and synthetic hydroxyapatite (HA) in  
rabbit femora. New bony tissue was obsd. in 20% of the image area around  
Bioglass particles by 1 to 2 wk, and the degree of trabecular bone growth  
increased with time. The interparticle space of Bioglass was filled by  
60% bonding bone between 6 to 12 wk. The rate const. of trabecular bone  
growth in the presence of Bioglass was calcd. to be  $10.9 \times 10^{-3}$  day<sup>-1</sup> at  
the periphery of the implantation site. HA particles led to smaller rate  
consts. of ca.  $4.6 \times 10^{-3}$  day<sup>-1</sup> at the periphery, and the HA particles  
developed very small amts. of bridging bone. Differences in rate consts.  
for bone growth in the center of the defect were even larger;  $7.2 \times 10^{-3}$   
day<sup>-1</sup> for Bioglass vs  $2.0 \times 10^{-3}$  days<sup>-1</sup> for HA particles. Quant. rates

of

bone growth assocd. with the particulates matched well with bioactive  
indexes of bulk implan

L4 ANSWER 9 OF 11 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 127:113321 CA  
TITLE: Particulate bioglass as a grafting material in the treatment of periodontal intrabony defects  
AUTHOR(S): Zamet, J. S.; Darbar, U. R.; Griffiths, G. S.; Bulman, J.S.; Bragger, U.; Burgin, W.; Newman, H. N.  
CORPORATE SOURCE: Departments of Periodontology Eastman Dental Institute for Oral Health Care Sciences, University College London, London, WC1X 8LD, UK  
SOURCE: J. Clin. Periodontol. (1997), 24(6), 410-418  
CODEN: JCPEDZ; ISSN: 0303-6979  
PUBLISHER: Munksgaard  
DOCUMENT TYPE: Journal  
LANGUAGE: English

AB The present clin. trial was designed to evaluate the effects of a bioactive glass, Perioglas in the treatment of periodontal intrabony defects. 20 Patients, 23-55 yr of age (44 sites), with intrabony defects completed the 1-yr study. Teeth with furcation involvement were excluded.

After completion of initial therapy, defects were randomly assigned to either a test or control procedure. Following flap reflection, root planing and removal of chronic inflammatory tissue in both groups, the test defects were restored with the **bioactive glass particulate** material. Mucoperiosteal flaps were replaced, sutured and a periodontal dressing was used. All the patients received postoperative antibiotics and analgesics and were seen at 1 wk for suture removal. Follow-up was then carried out weekly and at 3 mo, 6 mo, 9 mo and 1 yr post-surgery. Plaque score, bleeding score, probing pocket depth (PPD), probing attachment level (PAL) and gingival recession were recorded at baseline, 3 mo and 1 yr. Standardized radiographs for computer-assisted densitometric image anal. (CADIA) were taken at baseline, immediately post-operatively and at 1 yr. The CADIA data showed a significant increase (F-ratio: 15.67,  $p < 0.001$ ) in radiog. d. and vol. between the defects treated with the Perioglas when compared to those treated with surgical debridement only. PPD and PAL showed significant improvements in both exptl. and control sites, with a greater trend to improvement in the exptl. sites. It was concluded that this bioactive glass is effective as an adjunct to conventional surgery in the treatment of intrabony defects.



L4 ANSWER 7 OF 11 CA COPYRIGHT 2000 ACS

ACCESSION NUMBER: 129:127134 CA

TITLE: Effect of **particulate bioactive glass** on human synoviocyte cultures

AUTHOR(S): Bendall, Stephen P.; Gaies, Michael; Frondoza, Carmelita; Jinnah, Riyaz H.; Hungerford, David S.

CORPORATE SOURCE: The Good Samaritan Hospital, The Johns Hopkins University, Baltimore, MD, 21239, USA

SOURCE: J. Biomed. Mater. Res. (1998), 41(3), 392-397  
CODEN: JBMRBG; ISSN: 0021-9304

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Bioglass is a resorbable glass material that has been shown to induce osteoblast proliferation as well as bone matrix prodn. in vitro. Its physicochem. properties have been reported to be suitable for use as an implant coating for arthroplasty. However, Bioglass is a ceramic material

that can fragment into particulate debris in vivo. The effect of particulate Bioglass on tissue cells has not been defined. In order to det. the biol. response to particulate Bioglass, we tested its effect on human synoviocytes in a cell culture model. At the concns. of 1.0 and 10, .mu.g/mL, particulate Bioglass (sizes ranging from approx. 0.5 to 80 .mu.m) had a low cytotoxic effect. However, these concns. induced



09/164,293

L4 ANSWER 6 OF 11 CA COPYRIGHT 2000 ACS  
ACCESSION NUMBER: 130:227571 CA  
TITLE: Compositions for whitening teeth comprising  
**particulate bioactive glass**  
INVENTOR(S): Litkowski, Leonard J.; Hack, Gary D.; Greenspan,  
David  
C.  
PATENT ASSIGNEE(S): University of Maryland At Baltimore, USA;  
USBiomaterials Corporation  
SOURCE: PCT Int. Appl., 13 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9913852	A1	19990325	WO 1998-US18500	19980918
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
ZA 9808573	A	19990331	ZA 1998-8573	19980918
AU 9893785	A1	19990405	AU 1998-93785	19980918
EP 1011621	A1	20000628	EP 1998-946860	19980918
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1997-59222	19970918
			WO 1998-US18500	19980918
AB Compns. and methods for whitening teeth including contacting teeth with an effective amt. of <b>particulate bioactive glass</b> are disclosed. The efficacy of using a 7.5% dentifrice two time daily for whitening teeth is reported. The dentifrice contained 7.5% of a bioactive glass comprising silicone oxide 45, calcium oxide 24.5, sodium oxide 24.5, and phosphorous pentoxide 6%.				
REFERENCE COUNT:			3	
REFERENCE(S):			(1) Litkowski, L; US 5735942 A 1998	
			(2) Rheinberger, V; US 5432130 A 1995	
			(3) University Of Maryland At Baltimore; WO 9727148	

A1

L4 ANSWER 5 OF 11 CA COPYRIGHT 2000 ACS  
 ACCESSION NUMBER: 130:257300 CA  
 TITLE: Soft tissue response to glycerol-suspended  
 controlled-release glass particulate  
 AUTHOR(S): Cartmell, S. H.; Doherty, P. J.; Hunt, J. A.; Healy,  
 D. M.; Gilchrist, T.  
 CORPORATE SOURCE: Department of Clinical Engineering, University of  
 Liverpool, Liverpool, L69 3GA, UK  
 SOURCE: J. Mater. Sci.: Mater. Med. (1998), 9(12), 773-777  
 CODEN: JSMMEJ; ISSN: 0957-4530  
 PUBLISHER: Kluwer Academic Publishers  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Vesicoureteral reflux and urinary incontinence have previously been treated by various means including the endoscopic delivery of injectable bulking materials such as silicone micro-implants, PTFE implants, glass particles, fat and bovine collagen. These first three materials do not degrade and collagen requires frequently repeated injections in order to sustain the restored continence provided. Vesicoureteric reflux in children usually resolves independently before the age of five. Correction is required before this, because treatment by prophylactic antibiotics is frequently unsuccessful in preventing breakthrough infection. The ideal material for injection should have large particles to avoid migration, inject easily and controllably, be non-toxic and dissolve over the period of time by which time the kidney will be mature. Three different controlled-release glass (CRG) granule compns. have been prepd. by Giltech Ltd, and suspended in a suitable carrier medium (in

this case glycerol). The degradable glasses, which have two different size ranges of 200-300 and < 53 .mu.m, and three different soln. rates, were injected i.m. into the dorso-lumbar region of rats. Histol. anal. of cryostat cut section after time periods of 2 d, 4 and 9 wk, and 6 mon has been performed. Histol. sections were stained for neutrophils and macrophages using enzyme histochem. ED1 (monocytes and immature macrophages), ED2 (mature tissue macrophages), CD4 (helper/inducer T-lymphocytes and macrophages), CD8 (suppressor/cytotoxic T-lymphocytes), Interleukin-1.beta., IL-2 (activated T-lymphocytes), Major Histocompatibility Complex (MHC) class II (activated macrophages and activated B-lymphocytes), .alpha.-.beta. (T-lymphocytes) and CD45RA (B lymphocytes) antibodies have been used to stain immunohistochem. each sample. This study demonstrates that particulate, degrading glass is stimulating an inflammatory response in soft tissue at time periods up to 6 mon. It should be noted that very small particulate, fast degrading glass is leading to tissue necrosis and should not be considered further for these applications. However, larger particulate, slower degrading materials are demonstrating effective potential for stress incontinence applications.

REFERENCE COUNT: 14  
 REFERENCE(S): (1) Allen, W; Vet Record 1984, V115, P55 MEDLINE  
 (2) Allen, W; Vet Record 1985, P175 CA  
 (4) Burnie, J; Biomaterials 1981, V2, P244 CA  
 (9) Gilchrist, T; Biomaterials 1991, V12, P76 CA  
 (13) Schedle, A; J Biomed Sci Res 1998, V39, P560 CA